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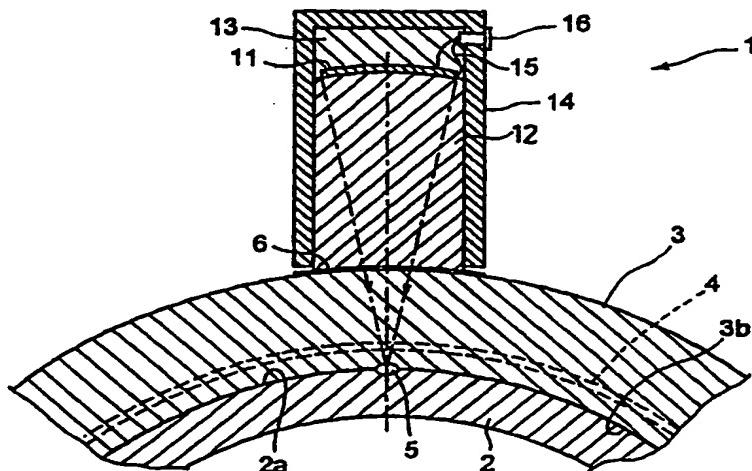
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(54) Title: FOCUSING LONGITUDINAL WAVE ULTRASONIC PROBE FOR INSPECTING POLYMER MATERIAL AND ULTRASONIC DEFECT EVALUATION SYSTEM

(54) 発明の名称 ポリマー材料検査用フォーカス型縦波超音波探触子及び超音波欠陥評価装置

(57) Abstract

A focusing longitudinal wave ultrasonic probe for inspecting a polymer material, provided with a curved piezoelectric element and a matching material having an input end face in close contact with the concave surface of the curved piezoelectric element and an output end face fitted to the surface of an object to be inspected, i.e. a polymer material, wherein the acoustic impedance of the matching material is matched with that of the object or/and that of the curved piezoelectric element; and a defect evaluation system for ultrasonic flaw detector provided with two gate circuits and evaluation circuits connected to respective gate circuits so as to realize ultrasonic flaw detection while considering intricate reflection echo and fluctuation of sound velocity.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP98/03962

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl⁶ G01N29/24, G01N29/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁶ G01N29/00-29/28

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-1998
Kokai Jitsuyo Shinan Koho	1971-1998	Jitsuyo Shinan Toroku Koho	1996-1998

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP, 8-275944, A (Nihon Dempa Kogyo Co., Ltd.), 22 October, 1996 (22. 10. 96), Full text ; Figs. 1 to 3 (Family: none)	1, 2, 4 3, 5-7
Y	JP, 4-340464, A (Nissan Motor Co., Ltd.), 26 November, 1992 (26. 11. 92), Full text ; Figs. 1 to 11 (Family: none)	1, 2, 4
Y A	JP, 57-162591, A (Yokogawa Electric Corp.), 6 October, 1982 (06. 10. 82), Claims ; Figs. 3, 4 (Family: none)	1, 2, 4 3, 5-7
A	JP, 9-210971, A (Kubota Corp.), 15 August, 1997 (15. 08. 97), Full text ; Figs. 1 to 4 (Family: none)	8-11

 Further documents are listed in the continuation of Box C. See patent family annex.

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Date of the actual completion of the international search
17 November, 1998 (17. 11. 98)Date of mailing of the international search report
1 December, 1998 (01. 12. 98)Name and mailing address of the ISA/
Japanese Patent Office

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